

ABSTRACT

A grafting reagent and related method of using the reagent to form a polymeric layer on a support surface, and particularly a porous support surface, in a manner that provides and/or preserves desired properties (such as porosity) of the surface. The reagent and method can be used to provide a thin, conformable, uniform, uncrosslinked coating having desired properties onto the surface of a preformed, and particularly a porous, polymeric substrate. The method includes the steps of a) providing a porous support surface, b) providing a nonpolymeric grafting reagent comprising a photoinitiator group, c) providing one or more polymerizable monomers adapted to be contacted with the surface, in the presence of the grafting reagent, and to be polymerized upon activation of the photoinitiator; and d) applying the grafting reagent and monomer(s) to the surface in a manner, and under conditions, suitable to coat the surface with the grafting reagent and to cause the polymerization of monomers to the surface upon activation of the grafting reagent.